

| Acidity Titration Method SM 18 th /20 th 2310 B | | | | | |
|--|------------------|---|---|-----|----------|
| Facility Name: _____ VELAP ID: _____ | | | | | |
| Assessor Name: _____ Analyst Name: _____ Inspection Date: _____ | | | | | |
| Relevant Aspect of Standards | Method Reference | Y | N | N/A | Comments |
| Records Examined: SOP Number/ Revision/ Date _____ Analyst: _____ | | | | | |
| Sample ID: _____ Date of Sample Preparation: _____ Date of Analysis: _____ | | | | | |
| Were all stock and standard solutions and dilution water prepared with distilled or deionized water that has been freshly boiled for 15 minutes and cooled to room temperature? | 3.a | | | | |
| Was KHC ₈ H ₄ O ₄ crushed to a size of 100-mesh and dried at 120°C for 2 hours? | 3.b | | | | |
| Was 10.0±0.5g KHC ₈ H ₄ O ₄ diluted to 1000mL for a concentration of 0.05N? | 3.b | | | | |
| Was a sodium hydroxide titrant prepared to 0.1N and standardized by titrating 40.00 mL of the KHC ₈ H ₄ O ₄ solution to the inflection point of approximately 8.7pH? | 3.c | | | | |
| Was the normality of the sodium hydroxide titrant adjusted to 0.1N or measured with the measured value used in further calculations? | 3.c | | | | |
| Was a sodium hydroxide titrant prepared to 0.02N and standardized against 15.00mL KHC ₈ H ₄ O ₄ as above? | 3.d | | | | |
| If a sample was suspected to contain hydrolysable metals and reduced forms of polyvalent cations, was the sample's pH verified to be <4 and treated by adding 5 drops of hydrogen peroxide then boiled for 2 to 5 minutes? | 4.a | | | | |
| Were the samples adjusted to room temperature? | 4.b | | | | |
| If free residual chlorine was present in samples, was it neutralized by adding 1 drop of sodium thiosulfate to samples or exposing to UV light? | 4.b | | | | |
| Were the samples titrated over a white surface for adequate visualization of color change? | 4.b | | | | |
| When forming a potentiometric titration curve was the curve obtained smooth indicating equilibrium being reached between successive alkali additions? | 4.c.2 | | | | |
| Notes/ Comments: | | | | | |